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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,660	07/31/2003	Yehuda Azenko	034704-000068	3563

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EXAMINER
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TU, CHRISTINE TRINH LE

ART UNIT	PAPER NUMBER
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2138

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/632,660

Applicant(s)

AZENKO ET AL.

Examiner

Christine T. Tu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8, 9, 11-14, 16-31 and 35-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8, 9, 11-14, 16-19, 26-31 and 35-37 is/are allowed.
- 6) ☒ Claim(s) 20-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 7, 10, 15 and 32-34 are cancelled.
2. Claims 1-6, 8-9, 11-14, 16-31 and 35-37 are pending and have been examined.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Objections***

4. Claim 16 is objected to because of the following informalities:

Claim 16:

At line 25, the word "rateto" should be replaced with "rate to".

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. Claims 20-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20:

At lines 2-5, the steps 1 and 2 are not coherent. Firstly, The steps 1 and 2 appear not to be interrelated each other. Secondly, these steps (steps 1 and 2) also appear not to be interrelated to any of the steps 3, 4 and 5 (at lines 6-9) either.

In other words, the determination of the dominant type of noise has no interrelationship with any of the proceeding steps [i.e. the determining feature (in step 3), comparing feature (in step 4) and the determining feature (in step 5)].

In addition, the selecting a group of burst profiles (in step 1) or the selecting an initial burst profile (in step 2) has no interrelationship with any of the proceeding steps [i.e. the determining feature (in step 3), comparing feature (in step 4) and the determining feature (in step 5)].

Claims 21-25:

These claims are rejected because they depend on claim 20 and contain the same problems of indefiniteness.

***Claim Rejections - 35 USC § 103***

6. Claims 20-25 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Anandakumar et al. (6,765,904 and Anandakumar hereinafter).

Claims 20-22:

Anandakumar discloses the invention substantially as claimed. Anandakumar teaches (figure 16) a process of rate/diversity adaptation comprises a feature of initialize a vector STATE having vector element value s (source rate) and d (diversity rate) (step 1605), a feature of inputting a QoS datum and measuring the packet loss fraction L (step 1611), features of comparing the value L to Thresholds 1, 2 and A (steps 1615, 1617, 1625, 1635), and features of updating the vector state into a NEWSTATE based on the result of the comparison (steps 1621, 1623, 1641, 1651). Such a NEWSTATE is updated according to the looking up in a table (figure 16, column 4 lines 59-60, column 36 line 4-column 37 line 54).

Anandakumar does not explicitly teach the noise on a channel. However, Anandakumar teaches the packet loss determination (step 1611). Anandakumar's packet losses are due to bit errors in error in modem/satellite links (figure 16, step 1611, column 6 lines 45-46). It would have been obvious to one skilled in the art at the time the invention was made to realize that Anandakumar's packet loss would have includes packet noise. One having ordinary skill in the art would be motivated to realize so because Anandakumar teaches that packet losses due to bit error in modem/satellite links (column 6 lines 45-46).

Anandakumar does not explicitly teach the selecting of group of burst profiles. Anandakumar suggests the use of a looking up table for updating NEWSATE [for example: (s32,d32) or (s31,d31)] (column 36 lines 4-10, 26-35, 39-46; and column 36 line 62-column 37 line 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to realize Anandakumar's looking up table would have been consisting of the selected contents such as (s31,d31) and (s32, d32). On having ordinary skill in the art would be motivated to realize so because in order to use Anandakumar's looking up table to update Anandakumar's NEWSTATE, the contents (s31,d31) and (s32,d32) must be available/selected in order to be used to process such a update of the NEWSTATE.

Claim 23:

Anandakumar teaches that if the packet loss fraction  $L$  does not exceed Threshold1, then the value  $L$  is further compared with Threshold2 (step 1625) (figure 16).

Claim 24:

Anandakumar further teaches features of updating the vector state into a NEWSTATE based on the result of the comparison (steps 1621, 1623, 1641, 1651). Such updated vector state is output (step 1661) (figure 16, column 4 lines 59-60, column 36 line 4-column 37 line 54).

Claim 25:

Anandakumar's NEWSTATE is updated according to a skilled worker (column 36 lines 31-38 and lines 43-50).

***Response to Arguments***

7. Applicant's arguments filed February 22, 2007 have been fully considered but they are not persuasive.

For claim 20, applicant argues that Anandakumar does not disclose or suggest the limitation of determining the dominant type of noise on a logic channel. Examiner, however, respectfully traverses applicant's remark.

Firstly, applicant should aware that due to the breath of claim 21, there is only a single type of noise ("dominate" type) being recited. Therefore, it is not clear how this (dominant) type of noise is different from other types (NOT CLAIMED) of noise.

Secondly, base on the broad recited term "dominant", Anandakumar's packet loss determination due to bit errors in error in modem/satellite links (figure 16, step 1611, column 6 lines 45-46) is equivalent to the recited determination of the dominate type of noise. In other words, Anandakumar's bit errors (in the error of the modem/satellite links) are not excluded from the inclusion of a "dominate" type of noise.

Applicant alleges that Anandakumar does not teach the feature of selecting a group of burst profiles suite to the dominant type of noise. Examiner does not agree with applicant's position.

Anandakumar does teach such feature. Anandakumar teaches the use of a looking up table for updating NEWSATE [for example: (s32,d32) or (s31,d31] (column

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36 lines 4-10, 26-35, 39-46; and column 36 line 62-column 37 line 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to realize Anandakumar's looking up table would have been consisting of the selected contents such as (s31,d31) and (s32, d32). On having ordinary skill in the art would be motivated to realize so because in order to use Anandakumar's looking up table to update Anandakumar's NEWSTATE, the contents (s31,d31) and (s32,d32) must be available/selected in order to be used to process such a update of the NEWSTATE.

8. Claims 1-6, 8-9, 11-14, 16-19, 26-31 and 35-37 are allowable over the prior arts of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Tu whose telephone number is (571)272-3831. The examiner can normally be reached on Mon-Thur. 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571)272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christine T. Tu  
Primary Examiner  
Art Unit 2138

March 8, 2007